Renewable Energy Markets and Transmission

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Renewable Energy Markets and Transmission

Want to generate electricity

Want someone to buy electricity

Need to get electricity to market

Laws and Policies that Affect Renewable Energy Projects

PURPA

RPS

Transmission Access

PURPA

- Public Utilities Regulatory Policies Act
 - Federal law
 - Required state laws to implement
- Requires IOUs to purchase power from Qualifying Facilities (QF)
 - NorthWestern Energy
 - Montana Dakota Utilities
- <10 MW
- Avoided Cost
 - Set by Public Service Commission (PSC)
 - Coops may negotiate with producer

Renewable Portfolio Standards

- **■** 10% 2010 − 2014
- **15%** 2015
- IOUs (Coops >5000 customers)
- Community Renewable Energy Projects
 - <25 MW

Transmission Access

- Public utilities and power marketing agencies required to wheel electricity through their systems
- Rates are regulated
- Must have capacity available

Renewable Resources

- Solar
 - PV
 - Thermal
- Wind
- Geothermal
- Tidal
- Biomass

Benefits of Biomass

- Baseload
- Dispatchable
- Fuel cost
- Site considerations
- Utility access

How to Sell Electricity

- Qualifying Facility
 - <10 MW
 - Rate set by PSC
- Power Purchase Agreement
 - No size limitation
 - Negotiate rate with buyer
 - Identify route

Getting Power to Market

- Transmission
 - Control Areas
 - Capacity
 - Access
 - Studies

Glass Half Full?

- Good time for biomass
 - Resources
 - Fuel
 - Interest
 - Need